prices and publishing them in the NASA Issuance System, and

(ii) Review and arrange for the billing of users.

(2) The Associate Administrator for Space Flight will arrange for:

(i) Developing estimates for costs and establishing prices in sufficient detail to reveal their basis and rationale.

(ii) Obtaining approval of the NASA Comptroller of such estimates and related information prior to the execution of any agreement, and

(iii) Reviewing of final billings to users prior to submission to the NASA Comptroller.

(b) *Field installation officials.* The Directors of Field Installations responsible for the STS operations will:

(1) Maintain and/or establish agency systems which are needed to identify costs in the manner prescribed by the NASA Comptroller,

(2) Compile financial records, reports, and related information, and

(3) Provide assistance to other NASA officials concerned with costs and related information.

APPENDIX A TO SUBPART 1214.2—COSTS FOR WHICH NASA SHALL BE REIMBURSED

Total Operating Costs. Total Operating Costs include all direct and indirect costs, excluding costs of composing the use charge. Such costs include direct program charges for manpower, expended hardware, refurbishment of hardware, spares, propellants, provisions, consumables and launch and recovery services. They also include a charge for program support, center overhead and contract administration.

APPENDIX B TO SUBPART 1214.2—OCCUPANCY FEE SCHEDULE

For a postponed or cancelled dedicated flight, the occupancy fee will be zero.

For a postponed or cancelled shared flight, the occupancy fee will be computed according to the computation instructions set forth below. If the computation results in an occupancy fee which is less than zero, the occupancy fee will be reset to zero.

For a postponed or cancelled shared flight one year or less, but more than six months before launch, the user shall reimburse NASA an occupancy fee of half the user's flight price less any adjusted reimbursements from other users who contract for the same flight subsequent to the postponement or cancellation date.

For a postponed or cancelled shared flight six months or less before launch, the user shall reimburse NASA an occupancy fee of 90% of the user's flight price less any adjusted reimbursements from other users who contract for the same flight subsequent to the postponement or cancellation date.

For a given shared flight, if the occupancy fee so computed would result in total adjusted reimbursements (exclusive of the 5% (10%) postponement (cancellation) fee) in excess of the price of a dedicated flight, the occupancy fee will be reduced in order to recover the price of a dedicated flight.

In the event that, as a result of the postponement or cancellation, the Shuttle is not launched at all for the intended flight, the occupancy fee will be zero.

For purposes of this attachment, *adjusted reimbursements* is defined to be reimbursements assuming all users are among those defined in §1214.201.

Subpart 1214.3—Payload Specialists for Space Transportation System (STS) Missions

SOURCE: 54 FR 48587, Nov. 24, 1989, unless otherwise noted.

§1214.300 Scope.

(a) This revision of subpart 1214.3 redefines the title of payload specialist and sets forth NASA's policy on and process for the determination of need, selection, and utilization of payload specialists and additional mission specialists to be assigned to a Space Transportation System (STS) flight in addition to the standard NASA flight crew.

(b) This subpart does not apply to the selection of crew for the Space Station Freedom. It is recognized that the Space Station has unique requirements regarding its crew and that a separate, specifically tailored policy will need to be developed in the future.

§1214.301 Definitions.

(a) *Payload specialists.* Individuals other than NASA astronauts (commanders, pilots, and mission specialists), whose presence is required on board the Space Shuttle to perform specialized functions with respect to operation of one or more payloads or other essential mission activities.

(b) *NASA or NASA-related payload.* A specific complement of instruments,

space equipment, and support hardware, developed by a NASA Program Office or by another party with which NASA has a shared interest, and carried into space to accomplish a mission or discrete activity in space.

(c) *Mission*. The performance of a coherent set of investigations or operations in space to achieve program goals. A single mission might require more than one flight or more than one mission might be accomplished on a single flight.

(d) *Mission manager*. The official responsible for the implementation of the payload portion of an STS flight(s).

(e) *Mission specialist*. A career NASA astronaut trained and skilled in the operation of STS systems related to payload operations and thoroughly familiar with the operational requirements and objectives of the payloads with which the mission specialist will fly. The mission specialist, when designated for a flight, will participate in the planning of the mission and will be responsible for the coordination of overall payload/STS interaction. The mission specialist will direct the allocation of STS and crew resources to the accomplishment of the combined payload objectives during the payload operations phase of the flight in accordance with the approved flight plan.

(f) *Investigator Working Group (IWG)*. A group composed of the Principal Investigators, or their representatives, whose primary purpose is facilitating or coordinating the development and execution of the operational plans of an approved NASA program or reporting the progress thereof.

(g) *Payload sponsor*. For NASA and NASA-related payloads the payload sponsor is the Associate Administrator of the sponsoring Program Office whose responsibilities are most closely related to the particular scientific or engineering discipline associated with a payload. For all other payloads, the payload sponsor is identified by the Associate Administrator who contracts with the agency or organization, whether foreign or domestic, private-sector or governmental, to fly a payload on the STS.

(h) *Unique requirements*. The need for a highly specialized or unusual technical or professional background or the need for instrument operations requiring a highly specialized or unusual background that is not likely to be found in the group of mission specialists or cannot be attained in a reasonable training period.

§ 1214.302 Background.

(a) The Space Transportation System (STS) has been developed to expand the Nation's capabilities to utilize the unique environment of space. It provides opportunity for individuals other than career astronauts to participate as onboard members of the flight crew under specified conditions. The purpose of such participation by these individuals is to ensure the achievement of the payload or mission-related objectives.

(b) The STS will provide these additional crew members with a habitable working environment and support services in such a way as to require a minimum of dedicated space flight training, allowing them to concentrate their efforts on the accomplishment of their scientific, technical, or mission objectives.

§ 1214.303 Policy.

(a) *General*. (1) The Challenger accident marked a major change in the U.S. outlook and policies with respect to the flight of other than NASA astronauts. NASA and interested external parties, domestic and international, must re-examine previous understandings, expectations, and commitments regarding flight opportunities in light of the new policies now being enunciated.

(2) NASA policies and their implementation recognize that:

(i) Every flight of the Shuttle involves risks;

(ii) Flight opportunities will now generally be limited to professional NASA astronauts and payload specialists essential for mission requirements; and

(iii) Top priority must be given to:

(A) Establishing, proving, and maintaining the reliability and safety of the Shuttle system;

(B) Timely and efficient reduction of the backlog of high priority scientific and national security missions; and